

863 Report of Test Results

Functional Group ID=**RT**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Report of Test Results Transaction Set (863) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to transmit the results of tests performed to satisfy a specified product or process requirement. This includes, but is not limited to, test data such as inspection data, certification data, and statistical process control measurements.

Notes:

Used for reporting summary sample test results for Lead and Copper, Chemicals, Radionuclides, Water Quality, Total Coliform and Microbiological samples.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BTR	Beginning Segment for Test Results	M	1		
Not Used	040	REF	Reference Identification	O	12		
Not Used	050	DTM	Date/Time Reference	O	10		
Not Used	060	PID	Product/Item Description	O	200		
Not Used	065	TMD	Test Method	O	1		
Not Used	070	MEA	Measurements	O	20		
			LOOP ID - N1			>1	
	080	N1	Name	O	1		
Not Used	090	N2	Additional Name Information	O	2		
Not Used	100	N3	Address Information	O	2		
Not Used	110	N4	Geographic Location	O	1		
	120	REF	Reference Identification	O	12		
			LOOP ID - PER			>1	
	130	PER	Administrative Communications Contact	O	1		
Not Used	140	REF	Reference Identification	O	>1		n1

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - LIN			>1	
	010	LIN	Item Identification	O	1		
Not Used	020	PID	Product/Item Description	O	1000		
Not Used	025	TMD	Test Method	O	1		
Not Used	030	MEA	Measurements	O	20		
Not Used	031	PSD	Physical Sample Description	O	>1		
Not Used	032	SPS	Sampling Parameters for Summary Statistics	O	>1		
Not Used	034	QTY	Quantity	O	10		
Must Use	040	DTM	Date/Time Reference	M	10		

	045	NTE	Note/Special Instruction	O	1
Not Used	050	REF	Reference Identification	O	1000
LOOP ID - N1					10
	051	N1	Name	O	1
Not Used	052	N2	Additional Name Information	O	2
Not Used	053	N3	Address Information	O	2
Not Used	054	N4	Geographic Location	O	1
Not Used	055	REF	Reference Identification	O	10
Not Used	056	PER	Administrative Communications Contact	O	3
Not Used	057	QTY	Quantity	O	10
LOOP ID - CID					>1
Must Use	060	CID	Characteristic/Class ID	M	1
Not Used	070	UIT	Unit Detail	O	1
Not Used	090	PSD	Physical Sample Description	O	>1
Not Used	100	SPS	Sampling Parameters for Summary Statistics	O	>1
Not Used	120	DTM	Date/Time Reference	O	10
Not Used	130	REF	Reference Identification	O	10
LOOP ID - MEA					>1
	150	MEA	Measurements	O	1
Not Used	160	DTM	Date/Time Reference	O	10
Not Used	170	REF	Reference Identification	O	10
LOOP ID - LM					>1
	172	LM	Code Source Information	O	1
Must Use	174	LQ	Industry Code	M	>1
LOOP ID - STA					>1
Not Used	180	STA	Statistics	O	1
Not Used	190	DTM	Date/Time Reference	O	10
Not Used	195	REF	Reference Identification	O	10
LOOP ID - LM					>1
Not Used	197	LM	Code Source Information	O	1
Not Used	200	LQ	Industry Code	M	>1
LOOP ID - TMD					100
	201	TMD	Test Method	O	1
Not Used	202	MEA	Measurements	O	>1
Not Used	203	DTM	Date/Time Reference	O	10
Not Used	204	REF	Reference Identification	O	10
LOOP ID - TSP					>1
Not Used	210	TSP	Test Period or Interval	O	1
Not Used	220	MEA	Measurements	O	>1
Not Used	230	DTM	Date/Time Reference	O	10
Not Used	240	REF	Reference Identification	O	10
LOOP ID - LM					>1
Not Used	242	LM	Code Source Information	O	1
Not Used	244	LQ	Industry Code	M	>1

Summary:

<u>Pos.</u> <u>No.</u>	<u>Seg.</u> <u>ID</u>	<u>Name</u>	<u>Req.</u> <u>Des.</u>	<u>Max.Use</u>	<u>Loop</u> <u>Repeat</u>	<u>Notes and</u> <u>Comments</u>
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	005	CTT	Transaction Totals	O	1
Must Use	010	SE	Transaction Set Trailer	M	1

Transaction Set Notes

1. The REF segment is to be used to send identification numbers associated with party referenced in the PER.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number.
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:
Notes: To indicate the start of a transaction set and to assign a control number

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
>> ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set "863" X12.41 Report of Test Results. This implementation of the 863 Report of Test Results is used for the submission of drinking water test results from laboratories to State agencies. Refer to 003061 Data Element Dictionary for acceptable code values.	M ID 3/3
>> ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

Segment:	BTR Beginning Segment for Test Results
Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of a test results transaction set
Syntax Notes:	
Semantic Notes:	<ol style="list-style-type: none"> 1 If BTR01 equals "01", "02", "03", "04", "05", "18" or "19", then BTR06 is required to identify the original test report reference number transmitted. 2 BTR02 is the date that this transaction set was created by the sending party. 3 BTR03 is the time that this transaction set was created by the sending party. 4 BTR05 specifies test results report reference number created by the sending party.
Comments:	

Data Element Summary					
	Ref. Des.	Data Element	Name	Attributes	
>>	BTR01	353	Transaction Set Purpose Code Code identifying purpose of transaction set '00' Original '15' Resubmission	M	ID 2/2
>>	BTR02	373	Date Date (YYMMDD) Creation date for drinking water test results. YYMMDD	M	DT 6/6
X	BTR03	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	O	TM 4/8
>>	BTR04	755	Report Type Code Code indicating the title or contents of a document, report or supporting item Code identifying the type of report. 'W2' Summary of Safe Drinking Water Report Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID 2/2
>>	BTR05	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Number assigned by laboratory for the report.	O	AN 1/30
	BTR06	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Required when report is a resubmission to provide original report number	O	AN 1/30
X	BTR07	786	Security Level Code Code indicating the level of confidentiality assigned by the sender to the information following Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID 2/2

Segment:	N1 Name
Position:	080
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. 2 N105 and N106 further define the type of entity in N101.
Notes:	Note: Two occurrences of the N1 loop are required at this location in the transaction set. One is required to identify the testing lab submitting the report. The second to identify the State/agency where the report is being sent.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, or an individual 'R5' State 'TL' Testing Lab Refer to 003061 Data Element Dictionary for acceptable code values.	M ID 2/2
	N102	93	Name Free-form name Name of the testing lab or State including agency	X AN 1/35
>>	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) Code identifying the source of the number in N104 '75' State ID Number 'FN' EPA Laboratory Certification ID Refer to 003061 Data Element Dictionary for acceptable code values.	X ID 1/2
>>	N104	67	Identification Code Code identifying a party or other code Appropriate identification number	X AN 2/20
X	N105	706	Entity Relationship Code Code describing entity relationship Refer to 003061 Data Element Dictionary for acceptable code values.	O ID 2/2
X	N106	98	Entity Identifier Code Code identifying an organizational entity, a physical location, or an individual Refer to 003061 Data Element Dictionary for acceptable code values.	O ID 2/2

Segment:	REF Reference Identification
Position:	120
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	<ol style="list-style-type: none"> 1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	This segment must be included in the N1 loop identifying the testing laboratory to convey the PIN when N101 equals 'TL'.

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	REF01	128	Reference Identification Qualifier Code Qualifying the Reference Identification '4A' A number that uniquely identifies a testing laboratory. The number is supplied by the state or the federal government. Refer to 003061 Data Element Dictionary for acceptable code values.	M ID 2/3
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30
X	REF03	352	Description A free-form description to clarify the related data elements and their content	X AN 1/80
X	REF04	C040	Reference Identifier To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	O
X	C04001	128	Reference Identification Qualifier Code Qualifying the Reference Identification Refer to 003061 Data Element Dictionary for acceptable code values.	M ID 2/3
X	C04002	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30
X	C04003	128	Reference Identification Qualifier Code Qualifying the Reference Identification Refer to 003061 Data Element Dictionary for acceptable code values.	X ID 2/3
X	C04004	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30
X	C04005	128	Reference Identification Qualifier Code Qualifying the Reference Identification Refer to 003061 Data Element Dictionary for acceptable code values.	X ID 2/3
X	C04006	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

Segment: **PER** **Administrative Communications Contact**
Position: 130
Loop: PER
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a person or office to whom administrative communications should be directed

Syntax Notes:

- 1 If either PER03 or PER04 is present, then the other is required.
- 2 If either PER05 or PER06 is present, then the other is required.
- 3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:

Comments:

Notes: Note: This segment should be included in the N1 loop identifying the Testing Lab if an identification of the certifying party is required.

Data Element Summary

	Ref.	Data	Name	Attributes		
	Des.	Element				
>>	PER01	366	Contact Function Code	M	ID	2/2
			Code identifying the major duty or responsibility of the person or group named			
			'CE' Certifier			
			Refer to 003061 Data Element Dictionary for acceptable code values.			
	PER02	93	Name	O	AN	1/35
			Free-form name			
			Name of certifying individual.			
X	PER03	365	Communication Number Qualifier	X	ID	2/2
			Code identifying the type of communication number			
			Refer to 003061 Data Element Dictionary for acceptable code values.			
X	PER04	364	Communication Number	X	AN	1/80
			Complete communications number including country or area code when applicable			
X	PER05	365	Communication Number Qualifier	X	ID	2/2
			Code identifying the type of communication number			
			Refer to 003061 Data Element Dictionary for acceptable code values.			
X	PER06	364	Communication Number	X	AN	1/80
			Complete communications number including country or area code when applicable			
X	PER07	365	Communication Number Qualifier	X	ID	2/2
			Code identifying the type of communication number			
			Refer to 003061 Data Element Dictionary for acceptable code values.			
X	PER08	364	Communication Number	X	AN	1/80
			Complete communications number including country or area code when applicable			
X	PER09	443	Contact Inquiry Reference	O	AN	1/20
			Additional reference number or description to clarify a contact number			

Segment:	LIN Item Identification
Position:	010
Loop:	LIN
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	<ol style="list-style-type: none"> 1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required.
Semantic Notes:	1 LIN01 is the line item identification
Comments:	<ol style="list-style-type: none"> 1 See the Data Dictionary for a complete list of IDs. 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., UPC No., ISBN No., Model No., or SKU.
Notes:	Note: One LIN loop should be created for each sample being reported. Each LIN loop must start with the LIN segment. A transaction set can accommodate multiple sample reports.

Data Element Summary				
Ref.	Des.	Data Element	Name	Attributes
X	LIN01	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/20
>>	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) 'TU' Tested material identification number.	M ID 2/2
>>	LIN03	234	Refer to 003061 Data Element Dictionary for acceptable code values. Product/Service ID Identifying number for a product or service Sample Category Identification 'PB' Lead and Copper 'CH' Chemicals 'XX' Cancel 'GE' General Samples 'RA' Radionuclides 'PP' Water Quality 'TC' Total Coliform 'MB' Microbiological	M AN 1/40
	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) 'S4' Laboratory Sample Identification	X ID 2/2

				'S5' State Sample Identification
				'S6' Previous Sample Identification
				Refer to 003061 Data Element Dictionary for acceptable code values.
	LIN05	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
				Appropriate sample number as assigned by the laboratory or the state. Used as an identification of the sample.
	LIN06	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				'S6' Previous Sample Identification
				Note: Required when sample type in PID04 equals RP Repeat.
				Refer to 003061 Data Element Dictionary for acceptable code values.
	LIN07	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
				Note: Appropriate sample number as assigned by the laboratory or the state. Used as an identification of the previous sample.
X	LIN08	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				Refer to 003061 Data Element Dictionary for acceptable code values.
X	LIN09	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
X	LIN10	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				Refer to 003061 Data Element Dictionary for acceptable code values.
X	LIN11	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
X	LIN12	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				Refer to 003061 Data Element Dictionary for acceptable code values.
X	LIN13	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
X	LIN14	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				Refer to 003061 Data Element Dictionary for acceptable code values.
X	LIN15	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
X	LIN16	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				Refer to 003061 Data Element Dictionary for acceptable code values.
X	LIN17	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
X	LIN18	235	Product/Service ID Qualifier	X ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
				Refer to 003061 Data Element Dictionary for acceptable code values.
X	LIN19	234	Product/Service ID	X AN 1/40
				Identifying number for a product or service
X	LIN20	235	Product/Service ID Qualifier	X ID 2/2

			Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003061 Data Element Dictionary for acceptable code values.			
X	LIN21	234	Product/Service ID Identifying number for a product or service	X	AN	1/40
X	LIN22	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	LIN23	234	Product/Service ID Identifying number for a product or service	X	AN	1/40
X	LIN24	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	LIN25	234	Product/Service ID Identifying number for a product or service	X	AN	1/40
X	LIN26	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	LIN27	234	Product/Service ID Identifying number for a product or service	X	AN	1/40
X	LIN28	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	LIN29	234	Product/Service ID Identifying number for a product or service	X	AN	1/40
X	LIN30	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	LIN31	234	Product/Service ID Identifying number for a product or service	X	AN	1/40

Segment:	DTM Date/Time Reference
Position:	040
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM06 is required. 2 If either DTM06 or DTM07 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	Note: Two DTM Segments per LIN loop are required to identify report start date and report end date.

Data Element Summary					
	Ref. Des.	Data Element	Name	Attributes	
>>	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time '090' Report Start Date '091' Report End Date Refer to 003061 Data Element Dictionary for acceptable code values.	M ID	3/3
X	DTM02	373	Date Date (YYMMDD)	X DT	6/6
X	DTM03	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	X TM	4/8
X	DTM04	623	Time Code Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Refer to 003061 Data Element Dictionary for acceptable code values.	O ID	2/2
X	DTM05	624	Century The first two characters in the designation of the year (CCYY)	O N0	2/2
	DTM06	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format 'D8' Date expressed CCYYMMDD Refer to 003061 Data Element Dictionary for acceptable code values.	X ID	2/3
	DTM07	1251	Date Time Period Expression of a date, a time, or range of dates, times or dates and times Expressed as CCYYMMDD	X AN	1/35

Segment: **NTE** Note/Special Instruction
Position: 045
Loop: LIN
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Syntax Notes:

Semantic Notes:

Comments: 1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
X	NTE01	363	Note Reference Code Code identifying the functional area or purpose for which the note applies Refer to 003061 Data Element Dictionary for acceptable code values.	O ID 3/3
>>	NTE02	352	Description A free-form description to clarify the related data elements and their content	M AN 1/80

Segment:	N1 Name
Position:	051
Loop:	N1
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. 2 N105 and N106 further define the type of entity in N101.
Notes:	Note: At least one occurrence of the N1 loop is required at this location in the transaction set to identify the water system.

Data Element Summary

Ref.	Data				
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
>>	N101	98	Entity Identifier Code	M	ID 2/2
			Code identifying an organizational entity, a physical location, or an individual		
			'WS' Water System		
			'FA' Water Facility		
			'W9' Sampling Location		
			Refer to 003061 Data Element Dictionary for acceptable code values.		
	N102	93	Name	X	AN 1/35
			Free-form name		
			The name of the water system, water facility or sampling location.		
>>	N103	66	Identification Code Qualifier	X	ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			Code identifying the number in N104		
			'FA' Facility		
			'FN' EPA Laboratory Certification Identification		
			Refer to 003061 Data Element Dictionary for acceptable code values.		
>>	N104	67	Identification Code	X	AN 2/20
			Code identifying a party or other code		
			Appropriate identification number.		
	N105	706	Entity Relationship Code	O	ID 2/2
			Code describing entity relationship		
			Refer to 003061 Data Element Dictionary for acceptable code values.		
	N106	98	Entity Identifier Code	O	ID 2/2
			Code identifying an organizational entity, a physical location, or an individual		
			Refer to 003061 Data Element Dictionary for acceptable code values.		

Segment: **CID** Characteristic/Class ID

Position: 060

Loop: CID

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify the general class or specific characteristic upon which test results are being reported or are to be taken

- Syntax Notes:**
- 1 At least one of CID01 CID02 CID04 or CID05 is required.
 - 2 If either CID03 or CID04 is present, then the other is required.
 - 3 If CID06 is present, then both CID03 and CID04 are required.
 - 4 If CID07 is present, then at least one of CID04 or CID05 is required.

Semantic Notes:

- Comments:**
- 1 CID06 specifies the individual code list of the agency specified in CID03.
 - 2 CID07 refers to whether or not the characteristic identified in CID04 or CID05 or both is affected by the product change. If it is affected, the value is "Y". A value of "N" is used when it is known that it will not be affected. Any other value indicates it is indeterminate.

Notes: At least one iteration of the CID loop is required for each sample summary report. There will be a separate CID loop for each analyte tested and reported on. A transaction set can contain multiple CID loop.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
X	CID01	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies Refer to 003061 Data Element Dictionary for acceptable code values.	X ID 1/3
X	CID02	750	Product/Process Characteristic Code Code identifying the general class of a product or process characteristic Refer to 003061 Data Element Dictionary for acceptable code values.	X ID 2/3
>>	CID03	559	Agency Qualifier Code Code identifying the agency assigning the code values 'EP' EPA Analyte Code List 'CA' Chemical Abstract System Code List Note: Choose either EPA or CAS Code List Refer to 003061 Data Element Dictionary for acceptable code values.	X ID 2/2
>>	CID04	751	Product Description Code A code from an industry code list which provides specific data about a product characteristic Appropriate code value from above list.	X AN 1/12
	CID05	352	Description A free-form description to clarify the related data elements and their content Analyte Name	X AN 1/80
X	CID06	822	Source Subqualifier A reference that indicates the table or text maintained by the Source Qualifier	O AN 1/15
X	CID07	1073	Yes/No Condition or Response Code Code indicating a Yes or No condition or response Refer to 003061 Data Element Dictionary for acceptable code values.	O ID 1/1

Segment: **MEA** **Measurements**

Position: 150

Loop: MEA

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

- Syntax Notes:**
- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
 - 2 If MEA05 is present, then MEA04 is required.
 - 3 If MEA06 is present, then MEA04 is required.
 - 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
 - 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: Note: All summary results should be reported here. A separate CID loop should be used for each test method.

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
MEA01	737	Measurement Reference ID Code Code identifying the broad category to which a measurement applies 'TR' Test Results 'CT' Count Refer to 003061 Data Element Dictionary for acceptable code values.	O ID 2/2
MEA02	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies 'ADM' Dye Manufacturing Units 'AGI' Aggressive Index 'CRF' Free Chlorine Residual 'CRT' Total Chlorine Residual 'CTT' Contact Time 'FLV' Flavor Threshold 'LAI' Langlier Index 'BR' Luminance (Brightness) 'PX' Purity 'COL' Color Units 'ABO' Absorbance 'OTH' Odor Threshold 'FR' Flow Rate 'pHA' pH Measurement 'TUR' Turbidity 'OBT' Observed Temperature (Sample Water Temperature) 'FLV' Flavor Threshold Refer to 003061 Data Element Dictionary for acceptable code values.	O ID 1/3
MEA03	739	Measurement Value The value of the measurement	X R 1/20
MEA04	C001	Composite Unit of Measure To identify a composite unit of measure(See Figures Appendix for examples of use.) 'UN' Unit	X

'CE' Degrees Celsius
 'FA' Degrees Fahrenheit
 'M1' Milligrams per liter
 '59' Parts per million
 'MC:::LT:-1' Micrograms per liter
 '61' Parts per billion
 'ZZ:::001' millirems
 'ZZ:::001:LT:-1:YR:-1' Milliremsper liter per year
 '4D:::000000000001:LT:-1' Picocuries per liter
 'GR:::000000001:LT:-1' Nanograms per liter
 'MR:::000000001' Nanometers
 'GE' Pounds per gallon
 '87' Pounds per cubic foot
 'ZP:::1000000:LT:-1' Millions of Fibers per liter
 'NR:::CM:-1' Microhos per centimeter
 'FK' Fibers
 'R8' Radioactive Equivalent in Man

X	C00101	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	C00102	1018	Exponent Power to which a unit is raised	O	R	1/15
X	C00103	649	Multiplier Value to be used as a multiplier to obtain a new value	O	R	1/10
X	C00104	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/2
X	C00105	1018	Exponent Power to which a unit is raised	O	R	1/15
X	C00106	649	Multiplier Value to be used as a multiplier to obtain a new value	O	R	1/10
X	C00107	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/2
X	C00108	1018	Exponent Power to which a unit is raised	O	R	1/15
X	C00109	649	Multiplier Value to be used as a multiplier to obtain a new value	O	R	1/10
X	C00110	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/2
X	C00111	1018	Exponent Power to which a unit is raised	O	R	1/15
X	C00112	649	Multiplier Value to be used as a multiplier to obtain a new value	O	R	1/10
X	C00113	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/2
X	C00114	1018	Exponent Power to which a unit is raised	O	R	1/15
X	C00115	649	Multiplier	O	R	1/10

			Value to be used as a multiplier to obtain a new value			
X	MEA05	740	Range Minimum The value specifying the minimum of the measurement range	X	R	1/20
X	MEA06	741	Range Maximum The value specifying the maximum of the measurement range	X	R	1/20
X	MEA07	935	Measurement Significance Code Code used to benchmark, qualify or further define a measurement value Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/2
X	MEA08	936	Measurement Attribute Code Code used to express an attribute response when a numeric measurement value cannot be determined Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	MEA09	752	Surface/Layer/Position Code Code indicating the product surface, layer or position that is being described Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/2
X	MEA10	1373	Measurement Method or Device The method or device used to record the measurement Refer to 003061 Data Element Dictionary for acceptable code values.	O	ID	2/4

Segment: **LM** Code Source Information
Position: 172
Loop: LM
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To transmit standard code list identification information
Syntax Notes:
Semantic Notes:
Comments: 1 LM02 identifies the applicable industry code list source information.

Data Element Summary				
Ref.	Data	Name	Attributes	
Des.	Element		M	ID 2/2
>>	LM01	559 Agency Qualifier Code		
		Code identifying the agency assigning the code values		
		'EP' Environmental Protection Agency		
		Refer to 003061 Data Element Dictionary for acceptable code values.		
	LM02	822 Source Subqualifier	O	AN 1/15
		A reference that indicates the table or text maintained by the Source Qualifier		
		'MCB1' Microbiological Table of Results		
		'SSTR' Sample Summary Table of Results.		

Segment: LQ Industry Code
Position: 174
Loop: LM
Level: Detail
Usage: Mandatory
Max Use: >1
Purpose: Code to transmit standard industry codes
Syntax Notes: 1 If LQ01 is present, then LQ02 is required.
Semantic Notes:
Comments:
Notes:

Note: This segment is mandatory if a LM segment is present.

Data Element Summary

Ref.	Data				
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
X	LQ01	1270	Code List Qualifier Code	O	ID 1/3
			Code identifying a specific industry code list		
			Refer to 003061 Data Element Dictionary for acceptable code values.		
	LQ02	1271	Industry Code	X	AN 1/30
			Code indicating a code from a specific industry code list		
			Sample Summary Table Results (SSTR Table)		
			Approved Values		
			'TO' Total samples collected		
			'RP' Repeat samples		
			'RT' Routine samples		
			'PO' Number of positive sample analytical results		
			'RJ' Rejected samples		
			'NE' Negative sample analytical results		
			'NF' Negative finished water samples		
			'NR' Negative raw water samples		
			'ND' Negative sample analytical results from distribution system samples.		
			'SR' Samples required		
			'RL' Replacement samples		
			'MR' Mean (average) result for period		
			'HR' High result for period		
			'LR' Low result for period		
			'CR' Chlorine Residual Taken		
			'CB' Chlorine Residual below 0.2mg/p		
			'RF' Required repeats per Federal regulations		
			'RS' Required repeats per State regulations		
			'CK' Check samples taken		
			'FV' Days in Federal violation period		
			'SV' Days in State violation period		
			'VI' Days of violation period		
			'RI' Replacement samples for invalid results		
			'SP' Special samples		

Segment:	TMD Test Method
Position:	201
Loop:	TMD
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To describe the nature of the test performed
Syntax Notes:	1 If either TMD02 or TMD03 is present, then the other is required. 2 If TMD09 is present, then TMD02 is required.
Semantic Notes:	1 TMD07 is the date of the test method as assigned by the issuing organization. 2 TMD08 is the document revision number.
Comments:	1 TMD09 specifies the individual code list of the agency specified in TMD02.
Notes:	The TMD loop is used when an EPA defined results method applies to the test results reported.

Data Element Summary					
Ref.	Data	Name	Attributes		
Des.	Element				
TMD01	750	Product/Process Characteristic Code	O	ID	2/3
		Code identifying the general class of a product or process characteristic			
		'RM' Result Method Code			
		Refer to 003061 Data Element Dictionary for acceptable code values.			
TMD02	559	Agency Qualifier Code	X	ID	2/2
		Code identifying the agency assigning the code values			
		'EP' Environmental Protection Agency Code List			
		Refer to 003061 Data Element Dictionary for acceptable code values.			
TMD03	751	Product Description Code	X	AN	1/12
		A code from an industry code list which provides specific data about a product characteristic			
		Approved code from code list.			
X	TMD04	937	Test Administration Method Code	O	ID 2/2
		Code specifying the method of administering the test			
		Refer to 003061 Data Element Dictionary for acceptable code values.			
X	TMD05	938	Test Medium Code	O	ID 2/2
		Code specifying organism on which the test was performed			
		Refer to 003061 Data Element Dictionary for acceptable code values.			
X	TMD06	352	Description	O	AN 1/80
		A free-form description to clarify the related data elements and their content			
X	TMD07	373	Date	O	DT 6/6
		Date (YYMMDD)			
X	TMD08	127	Reference Identification	O	AN 1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
X	TMD09	822	Source Subqualifier	O	AN 1/15
		A reference that indicates the table or text maintained by the Source Qualifier			

Segment:	CTT Transaction Totals
Position:	005
Loop:	
Level:	Summary
Usage:	Optional
Max Use:	1
Purpose:	To transmit a hash total for a specific element in the transaction set
Syntax Notes:	1 If either CTT03 or CTT04 is present, then the other is required. 2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment is intended to provide hash totals to validate transaction completeness and correctness.
Notes:	Note: One iteration of the CTT segment is required.

Data Element Summary						
	Ref. Des.	Data Element	Name	Attributes		
>>	CTT01	354	Number of Line Items Total number of line items in the transaction set The number in CTT01 element is the total number of LIN segments in the TS.	M	N0	1/6
X	CTT02	347	Hash Total Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	O	R	1/10
X	CTT03	81	Weight Numeric value of weight	X	R	1/10
X	CTT04	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	CTT05	183	Volume Value of volumetric measure	X	R	1/8
X	CTT06	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 003061 Data Element Dictionary for acceptable code values.	X	ID	2/2
X	CTT07	352	Description A free-form description to clarify the related data elements and their content	O	AN	1/80

Segment: **SE** Transaction Set Trailer
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
>>	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9